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## CLAIMS:

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- 1. A particulate material containing phospholipids with docosahexaenoic acid (DHA) residues prepared by drying a slurry comprising a polar lipid extract from DHA-containing microbes.
- 2. The particulate material of claim, wherein the mean particle size is between 5 microns and 10 microns.
  - The particulate material of claim 1, wherein the slurry is dried by spray drying.
- The particulate material of claim 1, wherein the slurry is substantially free of material which did not originate in said DHA-containing microbes.
  - 5. The particulate material of claim-1, wherein at least 10 % of the fatty acid residues in lipids of said microbes are DHA residues.
  - 6. The particulate material of claim 1, wherein at least 10 % of the fatty acid residues in polar lipids of said microbes are DHA residues.
- The particulate material of claim 1, wherein said microbes are dinoflagellates.
  - 8. The particulate material of claim 1, wherein said microbe are Crypthecodinium cohnii.
- 9. A method for preparing a DHA-containing particulate material comprising drying a slurry containing polar lipids extracted from dinoflagellates, wherein the dried material is in the form of particles having a mean particle diameter between 5 and 10 microns.



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- 10. A method for preparing a DHA-containing particulate material comprising lysing DHA-containing microbial cells; extracting lysed cells with solvent; separating a polar lipid fraction from the extract; and drying the polar lipid fraction, with or without addition of other nutrients, to form aparticulate material.
- 11. The method of claim 10, wherein the polar lipid fraction is an aqueous slurry which is dried by spray drying.
- 12. The method of claim 10, wherein the microbial cells are dinoflagellate cells.
- 13. The method of claim 10, wherein the microbial cells are cells of Crypthecodinium cohnii.
  - 14. An aqueous emulsion or suspension containing phospholipids with docosahexaenoic acid (DHA) residues prepared by Homogenizing with water a polar lipid extract from DHA-containing microbes.
  - The emulsion or suspension of claim 1, wherein at least 10 % of the fatty acid residues in lipids of the microbes are DHA residues.
  - 16. The emulsion or suspension of claim 1, wherein at least 10 % of the fatty acid residues in polar lipids of said microbes are DHA residues.
  - 17. The emulsion or suspension of claim 1, wherein said microbes are dinoflagellates.

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20 18. The emulsion or suspension of claim 1, wherein said microbes are Crypthecodinium cohnii.



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- 19. A composition comprising a particulate material containing phospholipids with DHA prepared by drying a slurry comprising a polar lipid extract from DHA-containing microbes and a meal containing protein, carbohydrate, or both.
- The composition of claim 19, wherein meal comprises microbial cells or cell fragments.
  - 21. The composition of claim 19, wherein the microbial cells or cell fragments are from *Chlorella*.
  - 22. The composition of claim 19 wherein the microbial cells or cell fragments are from *Crypthecodinium*.
- 10 23. The composition of claim 19, wherein the microbial cells or cell fragments are from a yeast.
  - 24. The composition of claim 19, wherein the microbial cells or cell fragments are from *Morteriella*.

